

BURUIANA, I.M.; HADARAG, M.; BARBULESCU, I.

Quality of proteins of the seminal plasma. Studii cerc biochimie
7 no.2:165-171 '64.

1. Chair of Biological Chemistry, Institute of Veterinary Medicine,
Bucharest. Submitted December 31, 1963.

BUSILA, V.T.; BACILA, E.; ROSIU, L.; TOPCIU, V.; BARBULESCU, L.;
DAMIAN, I.

Contribution to the epidemiology of Q fever. Stud. cercet.
inframicrobiol., Bucur. 7 no.3-4:295-301 July-Dec 56.

1. Comunicare prezentata in sedinta Institutului de
inframicrobiologie al Academiei R.P.R.

(Q FEVER, epidemiology
in Rumania, epidemic in agricultural community)

BARBULESCU, M.

BARBULESCU, M. Undeniable facts. p.l.

Vol. 9, no. 345, Jan. 1957

CONSTRUCTIVIST

TECHNOLOGY

ROMANIA

So: East European accession, Vol. 6, No. 5, May 1957

BARBULESCU, N.

Phenomena of induction. p. 180

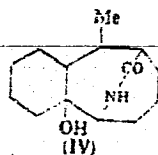
GAZETA MATEMATICA SI FIZICA. SERIA A.

Vol. 8, no. 4, Apr. 1956

Rumania

Source: EAST EUROPEAN LISTS Vol. 5, no. 10 Oct. 1956

7 The condensation of acetaldehyde with cyclohexanone.
N. Barbulescu. *Rev. chim. (Bucharest)* 7, 45-8 (1956)
(German summary).—The condensation of cyclohexanone
(I) with AcH gave 2 isomers: 2-ethylidenecyclohexanone
(II) and 4a-hydroxy-10-methyl-11-oxo-1,2,3,4,4a,
5,6,7,8,9,10,10a-dodecahydro-5,9-methanocyclooctobenz-
ene (III). III gave an oxime, m. 99-102°, which in turn



gave (IV), m. 204-5° (from EtOH), by the Beckmann re-
arrangement. Dehydration of III gave the 3,4a-dehydro
analog (V) of III, b.p. 141°. II with cold dil. alc. solus. of
alkali gave III which reversed to II on heating. I (2 moles)
in 0.075 mole N NaOH at 80-90° treated dropwise over 4
hrs. with a 1:3 mixt. of 1 mole AcH and EtOH, agitated
30 min., neutralized with N H₂SO₄ or HCl, the mixt. al-
lowed to stand several hrs., and the ppt. filtered, washed
with Et₂O, and dried in air gave 40 g. III, m. 159° (from
C₆H₆). The Et₂O and the nonreacted I removed and the oil
vacuum distd. gave II, b.p. 168-7° (middle fraction), n_D²⁰
1.5184, d₄²⁰ 1.074; *diastere*, m. 163-7°. Gary Gerard

BARBULESCU, N.
Romania/Analytical Chemistry - Analysis of Organic Substances

G-3

Abs Jour : Referat Zhur - Khimiya, No 3, 1957, 8595

Author : Angelescu, E., and Barbulescu, N.
Inst : Romanian Academy of Sciences
Title : An Analytical Method for the Rapid Quantitative Determination of Methylaniline and Methylaniline in Mixtures With Dimethylaniline

Orig Pub : Commun. Acad. RPR, 1956, Vol 6, No 1, 57-62 (in Romanian with summaries in French and Russian)

Abstract : A rapid method for the quantitative determination of methylaniline and of methylaniline in mixtures with dimethylaniline has been developed. The method is based on the measurement of the temperature rise during the acetylation of methylaniline with acetic anhydride. The determination is carried out in a large test tube equipped with a thermowell into which a thermometer graduated in 0.1° is inserted; the test tube is also provided with a stirrer. 10 ml of a 20% solution of acetic anhydride are added to the toluene in the test tube; when thermal equilibrium has been reached, 1 ml of the amine solution is added. The maximum temperature is observed and the temperature rise

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Romania/Analytical Chemistry - Analysis of Organic Substances

G-3

Abs Jour : Referat Zhur - Khimiya, No 3, 1957, 3595

(t) is determined; the concentration of the amine is calculated from the formula: $C(\%) = K_1 t + K_2 t^2$. The apparatus is calibrated in a number of preliminary experiments, using synthetic mixtures of amines, and the values of the constants K_1 and K_2 are determined.

Card 2/2

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BARBULESCU, N.

"Condensation of acetic aldehyde with cyclohexanone."

p. 45 (Revista De Chimie) Vol. 7, no. 1, Jan. 1956
Bucharest, Rumania

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

Barbulescu, N.

RUMANIA/Chemical Technology - Chemical Products and Their
Application, Part 3. - Industrial Organic
Synthesis.

H-15

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 47678

Author : N. Barbulescu, W. Adlcf

Inst :

Title : Preparation of Ethyl Ester of Orthoformic Acid.

Orig Pub : Rev. chim., 1957, 8, No 9, 605-606

Abstract : Ethyl ester of orthoformic acid (I) is prepared in an improved laboratory installation of continuous action using the reaction of CHCl_2 with $\text{C}_2\text{H}_5\text{ONa}$. The high yield (61% in reference to Na) is secured by a minimum contact of absolute alcohol with the atmospheric moisture and by the elimination of the action of metallic Na on the produced I.
A sketch of the installation is attached.

Card 1/1

RUMANIA/Organic Chemistry - Synthetic Organic Chemistry.

G.

Abs Jour : Ref Zhur - Khimiya, No 9, 1958, 28732

Author : Vasiliu, G. and Barbulescu, N.

Inst : "C.I. Parhon" University.

Title : The Condensation of 7-bromoacenaphthene with Sodium Benzyl Cyanide.

Orig Pub : An Univ 'C.I. Parhon', Ser stiint natur, No 14, 85-89 (1957) (in Rumanian with summaries in French and Russian)

Abstract : With a view toward the investigation of the conditions for the conversion of $C_6H_5CRR'CN$ to the corresponding acid, the authors have synthesized the nitriles of (7-acenaphthyl)-phenylacetic acid (I) and of (7-acenaphthyl)-phenylethylacetic acid (II), starting from 7-bromoacenaphthene (III) and sodium benzyl cyanide or sodium ethyl-benzyl cyanide. To a heated ether solution of

Card 1/2

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2A-1000-001, N.

RUMANIA/Organic Chemistry. Synthetic Organic Chemistry.

C

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70790.

Author : Vasiliu, Berbulesku.

Inst : Univ. « C.J. Parhon »

Title : The Condensation of Monochlorodimethyl Ester With Malonic Ester and Benzyl Cyanide.

Orig Pub: An. Univ. « C.J. Parhon » . Ser. stiint. natur, 1957, No 16, 99-106.

Abstract: Upon the condensation of $\text{ClCH}_2\text{OCH}_3$ (I) with $\text{CHNa}(\text{COOC}_2\text{H}_5)_2$ in ether at 25°C , decomposition with water and the usual treatment, methylene malonic ester was obtained in a 59% yield, b.p. $101-102.5^\circ\text{C}/3\text{ mm}$, n_D^{20} 1.4225, d_4^{20} 1.0401. The same reaction, when carried out in toluene (119°C) resulted in the formation of a mixture of methylene bis malonic

Card : 1/3

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RUMANIA/Organic Chemistry. Synthetic Organic Chemistry.

G

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70790.

ester, (yield 7%), and $\text{CH}_3\text{OCH}_2\text{C}(\text{COOC}_2\text{H}_5)_2\text{CH}_2\text{CH}$
 $(\text{COOC}_2\text{H}_5)_2$ (II), yield 25%, b.p. $199-201^\circ\text{C}/6\text{ mm}$,
 n_D^{20} 1.4461, d_4^{20} 1.1367. The hydrolysis of
 II with 17% hydrochloric acid at elevated tempe-
 rature resulted in the formation of α -methylene glu-
 taric acid which was then converted to 2,4-diamino-
 butene-1 by treatment with HN_3 , and was identified
 by the analysis of the corresponding chloroplatinate,
 $\text{PtCl}_4\text{C}_4\text{H}_{10}\text{N}_2$. Forty grams of 1,3-dicyan-1,3-diphenyl
 cyclobutane (III) was obtained from the condensation of
 80 grams of I with $\text{C}_6\text{H}_5\text{CHNaCN}$ (from 117 grams of
 $\text{C}_6\text{H}_5\text{CH}_2\text{CN}$ and 39 grams of sodamide in 0.4 liters of
 ether). Its boiling point is $207-209^\circ\text{C}$ at 0.5 mm
 n_D^{20} 1.5820, d_4^{20} 1.1170. The hydrolysis of III
 by heating for nineteen hours with potassium hydroxide

Card : 2/3

G

COUNTRY : RUMANIA
 CATEGORY : Organic Chemistry. Synthetic Organic Chemistry
 RES. JOUR. : RZKhim., No. 1 1960, No.1153
 AUTHOR : Barbuloscu, N.
 INST. : "G. I. Parhon" University
 TITLE : Condensation of Cyclohexanone with Acetaldehyde.
 Report III
 ORIG. PUB. : An. Univ. "G. I. Parhon." Ser. stiint. natur.,
 1958, No 20, 79-95
 ABSTRACT : The conversions of 2-methyl-3,4-tetramethylene-
 bicyclo-[3,3,1]-nonanol-4-one-9 (I), formed in
 cyclization of α, α' -ethylidenebiscyclohexanone
 (see report II, RZKhim., No 6, 1958, No 17844),
 have been studied. Upon reduction with 1.17
 moles of $(\text{iso-C}_3\text{H}_7\text{O})_3\text{Al}$ in 450 ml of xylol
 (boiling for 3 hours), I gives 2-methyl-3,4-
 tetramethylenobicyclo-[3,3,1]-nonanediol-4,9
 (II), yielding 95%, m.p. 126-127° (from benzene)
 CARD: 1/7
 G-8

COUNTRY :
 CATEGORY :
 ABS. JOUR. : RZKhim., No. 1 1960, No. 1153
 AUTHOR :
 INST. :
 TITLE :
 ORIG. PUB. :
 ABSTRACT : lenobicyclo-[3,3,1]-nonane (V), yield 40%, b.p.
 cont'd 263-265°/760 mm, 113-114°/1 mm, 86°/0.25 mm,
 n_D²⁰ 1.5080, d₄²⁰ 0.9415 and 1-methyl-2,3-
 tetramethylene-4,5-trimethylbenzene (VI), yield
 38%, b.p. 292-293°/760 mm, 133°/1 mm, n_D²⁰
 1.5626, d₄²⁰ 1.0188 (separation by rectifica-
 tion and treatment with H₂SO₄). The same mix-
 ture is formed on heating IV with ZnCl₂. Upon
 CARD: 4/7

30018
R/003/61/012/011/001/002
D015/D105

53400

AUTHORS: Bărbulescu, Em., Bărbulescu, N., and Tilichenko, M.N.
TITLE: Condensation of cyclohexanone with n- and i-butyric aldehydes
PERIODICAL: Revista de Chimie, v. 12, no. 11, 1961, 631 - 636

TEXT: The article deals with the diketonic condensation of cyclohexanone with isomeric n- and i-butyric aldehydes and with the products obtained. The work was started in 1949 at the "N.G. Chernyshevskiy" University in Saratov, USSR, by M.N. Tilichenko and N.K. Astakhova [Ref 1: DAN. 74, 1950, p 951] and by M.N. Tilichenko alone [Ref 2: Annals of the Saratov University, 1954], who demonstrated that α -methyl and α -methylene ketone condensation with aromatic and aliphatic aldehyde can direct the diketonic condensation towards the formation of the A-type δ -diketones. Similar studies were conducted later by several Western scientists and J. Plesek and P. Munk [Ref 12: Coll. Czech. Chem. Comm. 5, vol. 22, 1957, p. 1,596] who achieved a cyclohexanone condensation with acetic and propionic aldehydes, establishing the formation of corresponding tricyclic ketones. The reaction process depends on whether the diketonic condensation of

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30018
R/003/61/012/011/001/002
D015/D105

Condensation of cyclohexanone with n- and i- butyric aldehydes

cyclohexanone was carried out with isomeric n- or i-butyric aldehydes. In case of a diketone condensation, the normal aldehyde leads to a δ -diketone I, i.e. α,α -butylidene-bis-cyclohexanone, with a yield of 36-40%, which condensates into the corresponding ketone II, i.e. 3,4-tetramethylene, 2-propyl-dicyclo-(3, 3, 1)-nonanol-4, one-9. Isobutyric aldehyde mainly leads to the α,β -nonsaturated ketone III, i.e. α -isobutylidene-cyclohexanone of a 41% yield and to the α,α' -diethylene ketone IV, i.e. α,α' -diisobutylidene-cyclohexanone of a 38% yield. The condensation product δ -diketone V, i.e. α,α -isobutylidene-bis-cyclohexanone, which passes quantitatively into the isomeric ketone VI, i.e. 3,4-tetramethylene, 2-isopropyl-dicyclo-(3, 3, 1)-nonanol-4, one-9, gives a yield of only 4%. The α,β -nonsaturated ketone III is inert in the Michael reaction, probably due to a steric hindrance or electrical effect, whereas the α,β -nonsaturated isomeric ketone X, i.e. α -butylidene-cyclohexanone, reacts normally. Diketonic condensation may give a yield of approx 20%, by using a solvent requiring a temperature of 115°C, and by using the action of sodium isobutylate in

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R/003/61/012/011/001/002
D015/D105

Condensation of cyclohexanone with n- and i-butyric aldehydes

the presence of isobutyl alcohol. The authors prepared semicarbazone XIII, $C_{11}H_{19}ON_3$, from the ketone III and hydroxylamine derivative XIV, $C_{14}H_{28}O_3N_2$, from the ketone IV. By hydrogenation in the presence of palladium, the α, β -nonsaturated ketones III and X were converted into the saturated isomeric ketones XI and XII, i.e. α -isobutyl-cyclohexanone and α -butyl-cyclohexanone, respectively. There are 6 tables and 18 references: 11 Soviet-bloc and 7 non-Soviet-bloc.

ASSOCIATION: Em. Bărbulescu and N. Bărbulescu: Universitatea "C.I. Parhon" ("C.I. Parhon" University) in Bucharest; M.N. Tilichenko: State University in Vladivostok

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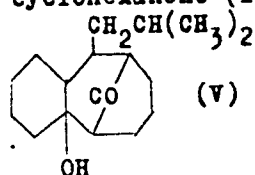
S/081/62/000/021/015/069
B156/B101

AUTHORS: Tilicenکو, M. N., Bădită, Gh., Bărbulescu, N.

TITLE: Condensation of cyclohexanone with isovaleraldehyde

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1962, 141, abstract 21Zh95 (An. Rom.-Sov. Ser. chim., v. 16, no. 4, 1961, 31 - 48 [Rom.; summary in Russ.])

TEXT: When cyclohexanone (I) is condensed with $(CH_3)_2CHCH_2CHO$ (II), the normal products of diketonic condensation are formed: α -isoamylidene cyclohexanone (III), α,α -isoamylidene-bis-cyclohexanone (IV) and (V):



(V) . Evidently substitution in the γ -position of the aldehyde

only reduces the reacting power of the intermediate product III by comparison with that of the product of condensation of I with $(CH_3)_2CHCHO$.

Card 1/4

Condensation of cyclohexanone with...

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Reduction of III resulted in the production of isoamyl cyclohexanone (VI). Ozonization showed that α, β -C=C-bonds were present. III is converted into V by the Michael reaction. When V is distilled in vacuo in the presence of OH ions, it is converted into IV, forming two dioximes with melting points of 182 - 184°C (VIIa) and 146 - 148°C (VIIb). The saturation of a solution of VIIa in a mixture of C_6H_6 and alcohol with HCl provides 9-iso-butyl octahydro acridine (VIII). Within 4 hrs, 1.5 moles of II are added to 5 moles of I in 500 ml of 1 N NaOH in boiling alcohol; after 12 hrs $\sim 3/4$ of the solvent is distilled off; six days later, 40 % of V, $C_{17}H_{28}O_2$, m.p. 162 - 163°C (from benzene), is separated. The filtrate is neutralized using phenolphthalein as an indicator, and 401 g of an oily liquid is drawn off with ether; distilling this liquid produces 17.5 g III, $C_{11}H_{18}O$, b.p. 98 - 100°C/1 mm Hg, n_D^{20} 1.4800, d_4^{20} 0.9417, semicarbazone (SC), m.p. 150 - 152°C (from alcohol), and 8 % IV, b.p. 198 - 201°C/mm Hg, n_D^{20} 1.5080. If the IV separated is treated with 40 ml of an alcoholic solution of NaOH, 31 g V are obtained. If 5 g III are hydrogenated in 10 ml absolute alcohol over 0.5 g of Pt-catalyst (760 mm, 0°C, 3.5 hrs, 670 ml H_2), 4.7 g VI, Card 2/4

Condensation of cyclohexanone with...

S/081/62/000/021/015/069
B156/B101

$C_{11}H_{20}O$, is separated, b.p. 95 - 96.5°C/2.5 mm Hg, n_D^{20} 1.4580, d_4^{20} 0.9085; SC, m.p. 139 - 140°C (from alcohol). Ozonized O_2 (5 % O_3) is passed through 5 g III in 20 ml $CHCl_3$ at 70°C for 4 hrs. The result is left for 12 hrs and cooled gradually to 20°C; at 47°C 10 ml water are added and the $CHCl_3$ and the II formed during the ozonizing are distilled off with vapor (II is identified as a dimedone derivative after separating the bisulfite derivative from the organic layer of the distillate); the residue is found to contain adipic acid, m.p. 149 - 151°C. To 5 g III and 10 g I at 24°C are added 10 ml of 1 N NaOH in alcohol (in 10 min, the temperature increases to 40°C); six days later, V is drawn off by adding water. 100 g unpurified V are distilled in vacuo, and 95.5 g IV are obtained, b.p. 208 - 210°C/5 mm Hg, n_D^{20} 1.5010. 90 g IV are added to a solution of 90 g crystalline CH_3COONa and 60 g $NH_2OH \cdot HCl$ in 500 ml 90 % alcohol; the mixture is boiled for 20 min, 200 ml of the solvent distilled off, and separation carried out in 1 l water; the result is 96 % of a mixture of VIIa and VIIb, $C_{17}H_{18}N_2O_2$; recrystallization from the alcohol produces 80 g VIIa ✓
Card 3/4

Condensation of cyclohexanone with...

S/081/62/000/021/015/069
B156/B101

and 9 g VIIb. 70 g VIIa in 300 ml of a 50 % mixture of alcohol and C_6H_6 are saturated with HCl gas, and the solvent is distilled off in vacuo; the residue is dissolved in water and neutralized with alkali, and ether used for extracting 80 % of VIII, $C_{17}H_{25}N$, b.p. 176 - 177°C/0.8 mm Hg, m.p.

28 - 29°C, n_D^{20} 1.5495, ferrocyanate, $C_{17}H_{25}N \cdot H_4[Fe(CN)_6]$, m.p. 180°C (with decomposition), ferricyanate, $(C_{17}H_{25}N)_2 \cdot H_3[Fe(CN)_6]$, m.p. 161°C (decomposition), and hexachloro platinate, $(C_{17}H_{25}N)_2 \cdot H_2(PtCl_6)$, m.p. 215 - 218°C, [Abstracter's note: Complete translation.]

Card 4/4

BARBULESCU, N., prof., univ. (Bucuresti)

The kinetic interpretation of the second law of thermodynamics.
Gaz mat fiz 15 no.1:27-35 Ja '63.

BARBULESCU, N., prof. univ.

Thermal death is impossible. St si Teh Buc 16 no. 5:
18-19 May '64.

BARBULESCU, N.

"Alkaloids" by D.Tefas, T.Stan. Reviewed by N.Barbulescu.
Studii cerc chim 11 no.1:152-153 '63.

POPA, Gr.; BAIULESCU, Gh.; BARBULESCU, N.; ILIE, V.A..

The Be (II) colorimetric determination. Studii cerc chim 11 no.2:
291-296 '63.

1. Catedra de chimie analitica a Facultatii de chimie a
Universitatii din Bucuresti.

BARBULESCU, N.; MAIOR, O.; GIOABA, A.

Crotonic and diketonic condensation of 2-acetylphenoxanthiin with aromatic and heterocyclic aldehydes. Rev chimie Min petr 15 no.6: 330-332 Je '64.

1. Laboratory of Organic Chemistry, Faculty of Chemistry, Bucharest University

AMBRUS, Tamara; TINCU, Lucia; MARCULESCU, Cristineta; BARBULESCU, N.

Some aspects of the synthesis of N-methylamide of the O,O-di-methyldithiophosphorylacetic acid. Rev chimie Min petr 15 no. 7:386-389 JI '64

1. Chemical Research Institute, Ministry of Petroleum and Chemical Industry.

L 64947-65 EPF(c)/EWP(j)/EWA(c) RFL JW/RM

ACCESSION NR: AP5023462

RU/0003/64/015/011/0675/0676

AUTHOR: Farbulescu, N.; Stoica, M.

TITLE: Synthesis of Di-(cycloalkane-spiro)-2',5'-oxazolidines

SOURCE: Revista de chimie, v. 15, no. 12, 1964, 675-676

TOPIC TAGS: cyclohexane, cyclohexanone, cyclic group, organic azo compound, alkane, organic nitrogen compound

ABSTRACT: [Authors' English summary modified]; The authors report the preparation of di-(cyclohexane-spiro)-2',5'-oxazolidine (XII A) by a process involving the preparation of cyclohexanone--cyanhydrine, its reduction with LiAlH_4 , the preparation of hydroxylamine picrate, its condensation with cyclohexanone and the preparation of the picrate of spiro-oxazolidine. The product was identified by elementary analysis and by picrate and infrared absorption spectra.

Orig. Art. Incl.: 15 formulas.

1/2

L 64947-65

ACCESSION NR: AP5023462

ASSOCIATION: Institutul politehnic, Galati (Politechnical Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: OC, GC

NR REF SOV: 000

OTHER: 003

JPRS

mk
Card 2/2

BARBULESCU, N.; LECA-MINECUTA, M.; STANESCU, Gr.

Dehydration of diols derived from 2,3-cyclohexana-
bicyclo-[3,3,1]-nonan. Rev chimie Min petr 16 no.2:76-
80 F '65.

1. Laboratory of Organic Syntheses, Faculty of Chemistry,
University of Bucharest.

L 31444-66

ACC NR: AP6023173

SOURCE CODE: RU/0003/65/016/002/0076/0080

AUTHOR: Barbulescu, N.; Leca-Manecuta, H.; Stanescu, Gr.

ORG: none

TITLE: Dehydration of diols derived from 2,3-cyclohexano-bicyclo-[3,3,1]-nonane

SOURCE: Revista de chimie, v. 16, no. 2, 1965, 76-80

TOPIC TAGS: condensation reaction, aldehyde, IR spectrum, UV spectrum, aromatic hydrocarbon, dehydration

ABSTRACT: The authors studied the conditions as well as the reduction mechanism of the carbonyl groups of some tricyclic cetols resulting from the condensation of aldehydes with cyclohexanone. They synthesized condensed cyclic hydrocarbons and were able to clarify some theoretical questions relating to ketonic condensation and cetyl dehydration reactions. Infra-red and ultra-violet spectral analysis was used in the study. Orig. art. has: 6 figures and 4 tables. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 07 / SUM DATE: none / ORIG REF: 006 / SOV REF: 005
OTH REF: 015

Card 1/1 JT

0915

1384

BARBUINGU, S.

Modern compass. p. 11

(ARIPLE PATRIE. Vol. 3, no. 2, Feb. 1957. Fatherland)

SO: Monthly List of East European Accessions (EEL) LC, Vol. 6, no. 7, July 1957. Uncl.

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BARNULESCU, S.

The seaplane.

p. 15 (Aripile Patiei, Vol. 3, no. 10, Oct. 1957. Bucuresti, Romania)

Monthly Index of East European Accessions (MEEA) 10. Vol. 7, no. 2,
February 1958

ALBU, Const.; BARBULESCU, V.

Contributions to the knowledge of the aromatic character of some
heterocycles. Rev chimie Min petr 13 no.7:421-424 J1 '62.

BULGARIA

BARBULOV, L., Lieutenant Colonel (Podpolkovnik), and STOYANOV, S., Lieutenant Colonel (Podpolkovnik), both in the Medical Corps (Meditsinskata Sluzhba).

"The Use of a Divisional Medical Corps Unit During Tactical Maneuvers with Troops."

Sofia, Voenno Meditsinsko Delo, Vol 18, No 5, October 1963, pp 49-51.

Abstract: The authors describe the course of a two-day training exercise which saw the medical unit rapidly assemble, begin loading gear and equipment through both the doors and windows of the first floor of the storage building without waiting for a formal roll call, move out in an orderly column of vehicles, set up tents and dig trenches in the field, and deploy to care for the "wounded" in the maneuver. Certain objective difficulties were found to exist in that some equipment was too heavy to be loaded onto the existing unit trucks and in that the unit's radio equipment was too weak to ensure uninterrupted contact with the vice commander of the rear echelon and with the divisional physician.

No references.

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URSU, I.; BARBUR, I.

Electronic spin resonance of the Pt-C system in the atmosphere of different gases. Comunicarile AR 13 no. 9:805-809 S'63.

1. Membru corespondent al Academiei R.P.R. (for Ursu).

EXCERPTA MEDICA Sec 7 Vol. 11/11 Pediatrics Nov 57

3057. BĂRBUȚĂ R., HAIMOVICI M. and MIHUL V. Clin. Ped. Anexa, Iasi. *Manifestări tuberculoase la scurt timp după vaccinarea cu B.C.G. Tb manifestations, shortly after BCG vaccination PEDIATRIA (București) 1956, 5/3 (250-255)
Stress is laid on the danger which BCG vaccination may involve in children having

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a stabilized and unknown bacillary primary infection whose detection is only possible by the intradermal reaction with weak tuberculin solutions. Thus 3 cases of infantile tb were observed: 1 case of meningitis in a young girl aged 14, a tb pulmonary infiltrate in a young girl aged 9, and a tb pleurisy in a young girl aged 14 yr., developed 15 days, 6 weeks and 15 days after BCG vaccination, respectively. Vaccination of these children was carried out after a previous intradermal reaction with tuberculin in a dilution of 1:10,000, which was negative. The correlation between BCG vaccination and tb in these children is discussed and it is concluded that BCG vaccination of children with tb infections may start an evolutive tb or generalization of the disease. The demonstration of tb infection in view of BCG vaccination of children, by a single reaction with tuberculin in a weak concentration (1:10,000), proves insufficient.

Bărbuță - Jassy (VII, 15)

HURMUZACHE, E., prof.; BARBUTA, R., dr.; TUDORANU, A., dr.; DOBRESCU, G., dr.;
MANAILA, V., dr.

Contribution to the study of essential hypertension with cerebral
hemorrhage in children. *Pediatrics (Eucur)* 14 no.1:19-23 Ja-F'65.

1. Lucrare efectuata in Clinica de pediatrie, Iasi.

BARBUTA, R., dr.; SIRBAN, Fl., dr.; HADMCVI I, M., dr.; VASILOVICI, R., dr.;
FILIP, M., dr.

Mannitol. clearance in infants. *Pediatrics* (Bucur) 14 no.1:
61-64 Ja-F'65.

1. Lucrare efectuata in Clinica de pediatrie, Iasi, si Casa
copilului (prof. E. Hurmuzache).

HURMUZACHE, E., prof.; BARBUTA, R., dr.; TUDOMANU, Aurelia, dr.

Unusual dyschondroplasia associated with amyloidosis. *Pediatrics*
(Bucur) 14 no. 2:161-164 Mr-Apr'65.

1. Lucrare efectuata in Clinica de pediatrie, Iasi (prof.
2. Hurmuzache).

BARBUTOV, G.

BARBUTOV, G. Coil capacity type. p. 6. Vol. 7, no. 10, Oct. 1956 ELEKTROENERGIJA
Sofia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

BARBUTOV, G.

"Concerning the drying of the transformer oil."

p.29 (Tezhka Promishlenost, Vol. 7, no. 1, Jan. 1958, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

BARBUTOV, G.; PANAIOTOV, P.

"Cascade partial capacitive protection of electric transformers with Jansen step-switch system"

Tezhka Promishlenost. Sofia, Bulgaria. Vol. 8, no. 2, Feb. 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclass

BARBUTOV, G.; NIKOLOV, G.

Electric modeling in construction of transformers. p. 31.

TEZHKA PROMISHLENOST. (Ministerstvo na tezhkata promishlenost) Sofiia, Bulgaria.
Vol. 8, no. 6, June 1959.

Monthly List of East European Accessions EEAI) LC, Vol. 9, No. 2, Feb. 1960.
UNCL

BARBITOV, G. inzh.; RANGELOV, R.

Cotton insulation of wires, and soaking the windings of oil transformers in lacquer. Mashinostroeni 11 no.6:16-22 Je '62.

BARBYN, N. S.

USSR/Chemistry - Photographic Dyes

May 52

"Investigations in the Field of Cyanine Dyes, VII. The Properties of Tetramethyl Thiocarbocyanines," I. I. Levkoyev, A. F. Vompe, N. N. Sveshnikov, N. S. Barbyn', All-Union Sci-Rec Cinematograph Inst

Zhur Obskch Khim, Vol 22, No 5, pp 879-886

Authors produced 23 symmetrical tetramethyl thiocarbocyanines with methyl groups in different positions on the benzene nucleus of the heterocyclic radical. They obtained 2,4,5-, 2,4,7-, 2,5,7- trimethylbenzthiazoles and some of their derivs. In the transition from dimethyl to tetramethyl thiocarbocyanine, the transmittance max of the dye was shifted to the long-wave portion of the spectrum in all cases. The introduction of the methyl groups at the 5,5' and 6,6' position gives a markedly greater bathochromic effect.

BARBYN', N. S.

USSR/Chemistry-Photography

Mar 52

"Some Derivatives of Benzthiazole. III. 2, 5, 6- and 2, 6, 7-Triethylbenzthiazoles,"
I. I. Levkoyev, N. N. Sveshnikov, N. S. Barbyn', M. P. Pashin, All-Union Sci Res Inst of
Cinematography and Photography

"Zhur Obshch Khim" Vol XXII, No 3, 1952, pp 516-521

When oxidized, 3, 4-dimethyl thioacetanilide and 3, 4-dimethyl phenyl thiourea, through
breaking of the thiazole ring in the *or* and *p*-positions with reference to the methyl
group, form mixts of 3, 6-dimethylbenzthiazoles which contain methyl or amino groups,
respect, in the "2" position. These compds and some of their derivs were studied.

PA 209T49

L 05694-67

ACC NR: AP6019731

SOURCE CODE: UR/0096/66/000/007/0037/0041

AUTHOR: Shagalova, S. L. (Candidate of technical sciences); Reznik, V. A. (Candidate of technical sciences); Shnitser, I. N. (Engineer); Barbyshev, B. N. (Engineer)

ORG: TsKTI-TKZ

TITLE: Furnace aerodynamics and anthracite combustion during the operation of direct- and vortical-flow burners

SOURCE: Teploenergetika, no. 7, 1966, 37-41

TOPIC TAGS: aerodynamic design, coal, vortex flow, furnace, steam boiler, Combustion Kinetics

ABSTRACT: The authors study furnace dynamics and combustion kinetics of anthracite during the operation of direct- and vortical-flow burners. Results are given from a study on the aerodynamics of a burning jet. The firebox velocity fields of the TP-90 boiler operating with long-flame burners and TP-70 boilers operating on ORGRES-TsKTI vortical type short-flame burners are compared with the results of cold scavenging. Analysis of the data shows that qualitative calculations carried out with respect to cold burner scavenging cannot be applied to processes which occur during firebox burner operation. Burning jet data must be used for calculating the material and thermal balances at the initial part of the jet. This isothermal data can be used

Card 1/2

UDC: 683.87:621.18.001.5

L 05694-67

ACC NR: AP6019731

for determining burner resistance factors, improving the design of individual burner elements and for explaining the qualitative nature of gas flow in the furnace. Orig. art. has: 6 figures, 2 tables, 1 formula.

SUB CODE: 13,21/SUBM DATE: None/ ORIG REF: 002

ps
Card 2/2

BLUM, I.; BARCA, Fr.; CERNICA, E.

- Study of the briquetting conditions of Rumanian lignites.
Bul Inst Politeh 25 no.4:43-54 J1-Ag '63.

1. Department of Combustibles and Organic Chemical Technology,
Bucharest Polytechnic Institute.

BLUM, I.; BARCA, Fr.

Possibilities of using the bitumen resulting from the distillation of coking and semicoking tars in coal briquetting. Bul Inst Politeh 25 no.5:67-80 S-O '63.

1. Department of Combustibles and Organic Chemical Technology, Bucharest Polytechnic Institute.

BARCA, Sándor, dr.; SCHWIMMER, Gyorgyne, dr.

Paroxysmal auricular fibrillation after vaccination. Orv. hetil.
97 no.3:82-83 15 Jan 56.

1. A Kutvolgyi uti Allami Korház (igazgató: Hancsok Mariusz dr.)
Belosztályának (főorvos: Policser Miklós dr. az
orvostudományok kandidátusa) közleménye.

(AURICULAR FIBRILLATION

paroxysmal, caused by vacc. with combined vaccines,
pathogen. (Hun))

(VACCINES AND VACCINATION

combined vaccines, causing paroxysmal auricular
fibrillation (Hun))

SOLYMAR, Jeno, dr.; POLICZER, Miklos, dr.; BARCA, Sandor, dr.;
SZEKELY, Arpad, dr.

Conditioned reflex studies with hydergine. Orv. hetil 97 no.
11:291-293 11 March 56.

1. A Kurvolgyi uti Allami Korhaz (igazgato-foorvos:
Hancsok, Mariusz dr.) Belosztalyanak (foorvos: Policzer, Miklos dr.)
kozlemenye.

(ERGOT ALKALOIDS, eff.
dihydrogenated deriv., inducing conditioned reflexes.
(Hun))

(REFLEX, CONDITIONED
induction by dihydrogenated ergot alkaloid inj. (Hun))

BARCA, Sandor, dr.; FOLDES, Janos, dr.; MATHE, Zoltan, dr.

Study on blood serum iron in acute hepatitis. Orv. hetil.
97 no.25:681-683 17 June 56.

1. A Kutvolgyi uti Allami Kórház (igaz.-főorvos: Hancsok, Mariusz dr.) Belosztal. (osztályvezető főorvos: Policzer, Miklós dr., az orvostudom. Kandidátusa) közl.

(BLOOD

iron determ. in infect. hepatitis & value as liver
funct. test. (Hun))

(IRON, in blood

determ. in infect. hepatitis & value as liver funct.
test. (Hun))

(HEPATITIS, INFECTIOUS, blood in

iron determ., value as liver funct. test. (Hun))

(LIVER FUNCTION TESTS

blood iron test. (Hun))

POLICZER, Miklos, dr.; MATHE, Zoltan, dr.; BARCA, Sandor, dr.

Diagnosis of autonomic regulation disorders. Orv. hetil. 97
no.42:1159-1163 14 Oct 56.

1. A Kutvolgyi uti Allami korhas (igazgato: Hancsok, Mariusz, dr.)
Belosztalyanak (foorvos: Policzer, Miklos, dr., az orvostudomanyok
kandidatusa) kozlomenye.

(AUTONOMIC NERVOUS SYSTEM, dis.
regulation disord., diag. methods (Hun))

VASILE, Maria; BARCA-TOMA, Elona

Study of the instrument system (meridian circle) at the Bucharest Observatory for the years 1958-1959. *Studii astron seismol* 9 no.2:249 '64.

1. Astronomical Observatory of the Rumanian Academy, Bucharest, 5 Cutitul de Argint Street.

... ..

Meeting of pre-mine workers in Spisska Nova Ves, n. 119, RUDY
(Ministerstvo hutního průmyslu a rudných dolů) Praha, Vol. 3,
No. 7, July 1955

SOURCE: East European Accessions List (EEal) Library of Congress,
Vol. 4, No. 12, December 1955.

BARCAK, A.

Utilization and generalization of the experience of Soviet miners. p.281.
Vol. 2, No. 11, Nov. 1954. RUDY. Praha.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, No. 3, March 1956

BARCAK, A.

BARCAK, A. For further development of the ore-mining industry in the second Five-Year Plan. p. 1.

Vol. 4, no. 1, Jan. 1956

RUDY

TECHNOLOGY

Praha, Czechoslovakia

So: East European Accession, Vol. 6, No. 2, 1957

BARCAK, A.

Mines' Day.

p. 297 (Rudy) Vol. 5, no. 9, Sept. 1957, Praha, Czechoslovakia

SC: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

BARCAL, J.; PIKRTOVA, V.

The airport in Ruzyn 1957. p. 550. (KRIDLA VLASTI, No. 13, Sept 1957,
Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

BOBEK, K., prof., dr.; BARCAL, J., MUDr.; HAVLICEK, V., inz.; KRECNER, V.,
inz., C.Sc.; MATOUSEK, J., p.l.; NOVAK, J., MUDr.; NOVAK, V., prof.,
inz., dr.; STIBOR, J., MUDr.; BAYER, K.

Commenting on K. Bayer's ideas on applied meteorology. Meteor spravy
15 no.6:179-180 D '62.

KURTOVIC, Dervis; KARAVANIC, Josip, inz.; BARCAL, Laslo, inz.;
BEHLILOVIC, Fehim, inz.; RADOSEVIC, Nikola

Discussion on submitted reports and communications. Geod
list 17 no. 4/6: 149-156 Ap-Je '63.

MATOUSEK, J.; BARGAL, R.

Cerebral vascular episodes and meteoropathology. Rev. Czech. M. 5
no.1:19-31 1959.

1. Institute of Medical Physics, Charles University in Plzen. Director: Dr. V. Havlovic Medical Clinic in Plzen. Director: Prof. K. Bobek.

(CEREBRAL HEMORRHAGE, physiol.
meteorol. factors)

(CLIMATE,
meteorol. factors in cerebral vasc. accid.)

BARCAL, Rudolf; MATOUSEK, Jiri

Bio-meteorology - a young medical discipline. Cas. lek. cesk. 99
no.23:697-703 3 Je '60.

1. Klinika chorob vnitřních v Plzni, přednosta prof.dr. Karel
Bobek a fyzikální ústav lékařské KU, pob. v Plzni, přednosta dr.
Vratislav Havlovic.
(WEATHER)

MATOUSEK, J.; BARCAL, R.

Meeting of the Bioclimatologic Group of the Czechoslovak Meteorologic
Society affiliated with the Czechoslovak Academy of Sciences, June
13-14, 1961. Meteor zprávy 15 no.2:52 '62.

LAVICKA, J.; MATOUSEK, J.; BARCAL, R.

Effect of therapy on meteorotropic conditions of rheumatic patients.
Acta univ. carol. [Med] Suppl. 15:231-235 '61.

1. Klinika chorob vnitrnich (prednosta prof. MUDr. K. Bobek) a fyzikalni
ustav (prednosta doc. MUDr. M. Petran) lekarske fakulty University
Karlovy se sidlem v Plzni.
(WEATHER) (RHEUMATISM ther)

BARCAL, Rudolf-
SURNAME, Given Names

(6)

Country: Czechoslovakia

Academic Degrees:

Affiliation:

Source: Prague, Prakticky Lekar, Vol 41, No 11, 1961, pp 505-509.

Data: " Rheumatism and Weather."

Authors: MATOUSEK, Jiri, MD /presumably/ Institute of Physics (Fyzikalni
ustav); Director: Dr V. HAVLOVIC.

BARCAL, Rudolf, MD /presumably/ Institute of Physics.
LAVICKA, Josef, MD, /pregumably/ Clinic of Internal Diseases of
the Faculty of Medicine KU (Klinika chorob vnitr-
nich lekarske fakulty KU)/Karlova universita;
Charles University/; ~~XXXXXX~~ Director: Prof K.
BOBEK, MD.

71

BARCAL, RUDOLF

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees:

Affiliation:

Source: Prague, Prakticky Lekar, Vol 41, No 11, 1961, pp 505-509.

Data: " Rheumatism and Weather."

Authors: MATOUSEK, Jiri, MD /presumably/ Institute of Physics (Fyzikalni ustav); Director: Dr V. HAVLOVIC.

BARCAL, Rudolf, MD /presumably/ Institute of Physics.

LAVICKA, Josef, MD, /presumably/ Clinic of Internal Diseases of the Faculty of Medicine KU (Klinika chorob vnitrich lekarske fakulty KU)/Karlova universita; Charles University/; ~~KXXXXX~~ Director: Prof K. BOBEK, MD.

70

MATOUSEK, J.; BARCAL, R.

Meeting of the Bioclimatological Group of the Czechoslovak
Meteorological Society. Meteor zpravy 15 no.3/4:112 Ag '62.

BARCAL, R.

11. "Meeting of the Soviet Branch of the Psychiatric Section of the USSR Academy of Sciences, 1961." Journal of Psychiatry, 20 (1961), 1-2. (Leningrad and Moscow, 1961.)
12. "Speech of A. Zeleny at the 1961. 1st KOLLEGIUM: 1961." Journal of Psychiatry, 20 (1961), 1-2.
13. "International Symposium on the Use of Ultrasonics." Journal of Psychiatry, 20 (1961), 1-2.
14. "Fourth National Festival of Young Motion Pictures Having Health as Their Subject." Journal of Psychiatry, 20 (1961), 1-2.

— 2/2 —

KRIVSKY, L., RNDr., CSc.; BARCAL, R., MUDr.

Mortality of population and the extreme changes of
atmospheric pressure. Meteor zpravy 16 no.3/4:76-77
Ag '63.

1. Astronomický ústav, Československá akademie věd, Ondřejov
u Prahy; Interní klinika lékařské fakulty, Plzeň.

BOREK, K., prof., M.D. r.; MAJOUSEK, J., promovany lekar; BARGAL, R.,
promovany lekar

Medical biometeorology abroad. Meteor zpravy 16 no.3/4:
101-102 Ag '63.

1. Interni klinika a Fysikalni ustav lekarske fakulty, Plzen.

MATOUSEK, J.; BARCAL, R.

First meeting of the Special Bioclimatic Group of the Czechoslovak Meteorological Society affiliated with the Czechoslovak Academy of Sciences. Meteor zpravy 16 no.5:155-156 0'63.

BARGAL, R. ; GRIGAR, I.; OPATNY, K.; SPATNY, F.

Lipoma with secondary incorporation into the mesentery. Cesk.
gastroent. vyž. 17 no.8:469-472 D'63

1. Klinika chorob vnitřních lékařské fakulty Karlovy University
v Plzni (prednosta prof. dr. K. Bobek); Ustřední rentgenové
odd. fakultní nemocnice v Plzni (vedoucí MUDr. Z. Chudacek, CSc.)
a I. chirurgická klinika lékařské fakulty Karlovy University v
Plzni (prednosta doc. dr. J. Spinka).

KITOUSEK, J.; BARCAL, R.

Meeting of the Bioclimatological Group of the Czechoslovak Meteorological Society affiliated with the Czechoslovak Academy of Sciences. Meteor zpravy 17 no.2:56 Ap '64.

MATOUSEK, J.; BARCAL, R.

Meeting of the Bioclimatological Group in Frantiskove Lazne.
Metacr zpravy 17 no. 3:96 Je '64.

MATOUSEK, J.; BARGAL, R.

Meeting of the Bioclimatological Group in Brno, September
20-21 1963. Meteor zpravy 17 no.5:158 0 '64.

Conference of the Technical Bioclimatological Group.
Ibid.:159

BANČAL, Rudolf; OPATĚNÝ, Karel; UHLÍŘ, Jaromír.

Successful use of a cardio stimulator in an 85-year old patient
with complete atrioventricular block. Plzeň lek. sborn. 24:
99-101 '64

1. Klinika chorob vnitřních lékařské fakulty University
Karlovy v Plzni (prednosta: prof. MUDr. K. Bobek) a II.
chirurgická klinika lékařské fakulty Univerzity J. E. Purkyně
v Brně (prednosta: prof. MUDr. J. Navrátil, DrSc.).

OPATRNY, Karel; BARCAL, Rudolf

Therapeutic success in hypercholesteremic xanthomatosis. Plzen.
lek. sborn. 24:109-113 '64.

1. Klinika chorob vnitřních lékařské fakulty University Karlovy
v Plzni (prednosta: prof. MUDr. K. Bobek).

BOBEK, K., prof. dr. [deceased]; CAJZL, L.; CEPELAK, V.; SLAISOVA, V.;
OPATNÝ, K.; BARCAL, R.

Venous diseases and the role of various factors in their development. Cas. lek. česk. 104 no. 14: 361-366 9 Ap '65

1. Klinika chorob vnútorných fakulty všeobecného lekárstvi v
plzni (prednosta: prof. dr. K. Bobek [deceased]).

CERNIK, L.; BARCAL, R.; MATOUSEK, J.; HO TAN-PEI; DOAN HONG-HOA;
NGUYEN DUY-VAN

Bronchial asthma under the climatic conditions of North Vietnam.
Vnitřní lek. 11 no.10:940-946 0 '65.

1. Klinika chorob vnitřních (prednosta prof. dr. K. Bobek [deceased])
a fyzikální ústav (prednosta doc. dr. E. Petráň) lékařské fakulty
University Karlovy se sídlem v Plzni a vnitřní oddělení Nemocnice
vietnamsko-československého přátelství v Haiphongu, VDR.

BARCALOVA, Dagmar

Aphasia as a side-effect of phenergan in the treatment of bronchial
asthma. Cesk. pediat. 14 no.11:1042-1043 November 59.

(ASTHMA, ther.) (APHASIA, etiol.)

(PROMETHAZINE, eff. inj.)

CONSTANTINESCU, S.; TEODORESCU, B.; SANIELEVICI-MARINOV, S.; CUNESCU, V.; IACOB, A.; SCHMITZER, G.; VULCANESCU, M.; MARINOV, M.; VASILESCU, C.; LICHTENBERG, R.; ~~BARGAN, F.~~; ~~BANESCU, E.~~; ~~BERNSTEIN, D.~~

Mass clinical and radiological detection (by radiophotography) of carditis in school-age children. Probl. reumat., Bucur. no.5:79-82 1958.

(RHEUMATIC HEART DISEASE, prevention & control
in school-aged child. in Rumania, clin. & radiol. diag.)

BARCAN, J; VTELENSKY, J.

"Chemical mineralogical investigation of the iron ores in the Barrandien area. I.
The locality of Chrustenice."

p. 27 (Central Geologic Institute, Czechoslovak Academy of Sciences) Vol. 33, no. 1, 1958

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 5, May 1958

BARCANESCU, V.

New problems and methods in analytical chemistry.

P. 123 (REVISTA DE CHIMIE) (Bucuresti, Rumania) Vol. 8, No. 2, Feb. 1957

30: Monthly Index of East European Accessions (MEAT) IC Vol. 7, No. 5, 1958

RUMANIA/Physical Chemistry.

B

Abs Jour: Ref Zhur-Khim., No 1, 1959, 286.

Author : Darcănescu V., Minasian H.

Inst :

Title : Silica As a Raw Material for the Preparation of
Semi-Conductors.

Orig Pub: Rev, Chin., 1958, 9, No 2, 71-77.

Abstract: Series of theoretical aspects are cited and a description for the preparation of semi-conductors and their characteristics are given. Preparation of silica by two methods is described : By the reduction of SiO_2 with Al and Mg, and by the reduction of SiCl_4 in a liquid or gaseous phase; the reagents used and the operating conditions are mentioned. --
Author's resume.

Card : 1/1

RUMANIA / Analytical Chemistry. Analysis of Inorganic Substances. E

Abs Jour: Ref Zhur-Khimiya, No 4, 1959, 11506.

Author : Baroanescu, V., Potamian, E., Bartos, V.

Inst : ~~Not~~ given.

Title : Determination of Impurities in Industrial Selenium.

Orig Pub: Rev. chim., 1958, 9, No 6, 307-310.

Abstract: For the separation and determination of impurities, contained in selenium, a method is proposed, which does not require a preliminary separation of Se by calcination and, consequently, prevents doing damage to the Pt crucibles and also prevents evaporation of the oxides of some impurities. A specimen of Se (5-10 g) is evapor-

Card 1/4

RUMANIA / Analytical Chemistry. Analysis of Inorganic Substances. E

Abs Jour: Ref Zhur-Khimiya, No 4, 1959, 11506.

Abstract: are evaporated to dryness, treated with a solution of HCl, and the residue of AgCl is filtered off. The solution, after the AgCl separation, is condensed by boiling, treated with a solution of HCl and solid $\text{NH}_2\text{OH}\cdot\text{HCl}$ (for the reduction of the remaining portion of Se), and the remaining portion of Se, which interferes with the subsequent determination of Cu and Pb, is filtered off. In the resulting filtrate, Pb is precipitated by sulphuric acid and determined as PbCrO_4 , and in the filtrate, after the separation of PbSO_4 , Fe^{3+} , Al^{3+} and Bi^{3+} are precipitated with the aid of NH_4OH and NH_4Cl . In subsequent operations, the sesquioxides are determined by precipitation

Card 3/4

RUMANIA / Analytical Chemistry. Analysis of Inorganic Substances. E

Abs Jour: Ref Zhur-Khimiya, No 4, 1959, 11489.

Author : Barcanescu, V., Minasian, H.

Inst : Not given.

Title : Determination of Boron in Silica.

Orig Pub: Rev. chim., 1958, 9, No 6, 316-318.

Abstract: There is described a photometric method of the determination of B with the aid of carmine. The interaction of carmine with compounds of B in a sulphuric acid medium produces a blue color, which conforms to the Beer's law for the concentration of B up to 1 /ml. The color develops its maximum intensity in 45 minutes, and is stable for 24 hours. Pb, Zr and Mo do not interfere. Because sulphuric acid precipitates SiO_2 , which

Card 1/3

69349

5(2)

R/003/60/011/04/034/041
D0015/D3001

5.2400

AUTHORS:

Bărcănescu, V., and Potamian, E.

TITLE:

Colorimetric Determination of Antimony in Silicon \
for Semiconductors

PERIODICAL:

Revista de Chimie, 1960, Vol 11, Nr 4, pp 240-241

ABSTRACT:

The article contains a communication presented to the meeting on "Methods of Analysis for the Titration of Rare and Dispersed Elements", held by the Comisia de Chimie Analitică a Secției de Chimie din Consiliul Central ASIT (Analytical Chemistry Commission of the Chemistry Section at the ASIT Central Council) from 21-22 December 1959. The radio-chemical and colorimetric methods for determining antimony, as an impurity in semiconductors, have the highest sensitivity. The accuracy of the colorimetric method is

X

satisfactory enough for a $10^{-5}\%$ Sb content. L.N.

Card 1/3

Lepin and V.O. Ghein pointed out that brilliant green

69349

R/003/60/011/04/034/041
D0015/D3001

Colorimetric Determination of Antimony in Silicon for Semiconductors

may be used as the dyestuff in this analysis. It was also employed by the authors who chose it for sensitivity, easiness and rapidity of titration of Sb in residues of Si with hydrofluoric and nitric acid. The silicon sample passes into a solution with the aid of a $\text{HNO}_3 + \text{HF}$ mixture of acids. Upon removal of SiF_4 and of the excess of acids, the residue, by repeated evaporations, passes into a hydrochloric solution. Tests with various quantities of standard solutions showed that there is no loss of antimony by this process. The residue, which passed into the hydrochloric solution, oxidized with a solution of sodium nitrite to Sb^{5+} . The results of a great number of sample tests showed the possibility of

Card 2/3

69349

R/003/60/011/04/034/041
D0015/D3001

Colorimetric Determination of Antimony in Silicon for Semiconductors

determining the antimony content, the sensitivity being 2:10,000,000. In a test sample of 3 g silicon, quantities of 0.00002% Sb may be determined by visual colorimetry. The method is applicable in estimating the contents of "chemically" pure silicon.

Card 3/3

BARCANESCU, V.; POTAMIAN, E.

Rapid analysis of silicates. Rev. chimie Min petr 12 no.11:670-
673 N '61.

CRUCEANU, Eugenia; CALUGAREANU, Sofia; BARCANESCU, V.

Spectrochemical determination of impurities in antimonious
~~antimony~~ alloy for grills. Rev chimie Min petr 15 no. 1: 37-39
Ja '64.

BARCANESCU, V.; POTAMIAN, Eufrosina; CALUGAREANU, Sofia

Complexometric and chromatographic analysis of ferrites.
Rev chimie Min petr 15 no.9:561-564 S '64.

ANTOHI, Constantin; BARCANESCU, Virgil; PASCAL, Paula, ing. chim.;
FURTUNESCU, Elisabeta, ing. chim. (Bucuresti)

Insulating schemes for electric machines used to drive the
compressors in the capsulated refrigerating aggregates. Electrotehnica
12 no.12:461-468 D '64.

1. Chief Engineer, Research and Electrical Engineering Planning
Institute (for Antohi). 2. Head of Laboratory, Research and Electrical
Engineering Planning Institute (for Barcanescu). 3. Research and
Electrical Engineering Planning Institute (for Pascal, Furtunescu).

L 41546-65 EWT(1)/EED-2
ACCESSION NR: AP5012411

RU/0003/64/015/009/0561/0564

12
B

AUTHOR: Barcanescu, V.; Potamian, Eufrosina; Calugareanu, Sofia

TITLE: Complexometric-chromatographic analysis of ferrites

SOURCE: Revista de chimie, v. 15, no. 9, 1964, 561-564

TOPIC TAGS: iron compound, manganese compound, zinc compound, nickel compound, chromatographic analysis

Abstract [Authors' English summary modified]: The authors describe methods for the complexometric-chromatographic determination of the elements Fe, Mn, Mg, and Zn in manganese-zinc ferrites and of the elements Fe, Ni, Co, and Zn in nickel-zinc ferrites. The methods presented are easier and more rapid than the standard ones and give reproducible results. Orig. art. has 1 figure and 2 tables.

ASSOCIATION: none

SUBMITTED: 00
NO REF SOV: 002

ENCL: 00
OTHER: 025

SUB CODE: HM, GC
JPRS

Card 1/1 *me*